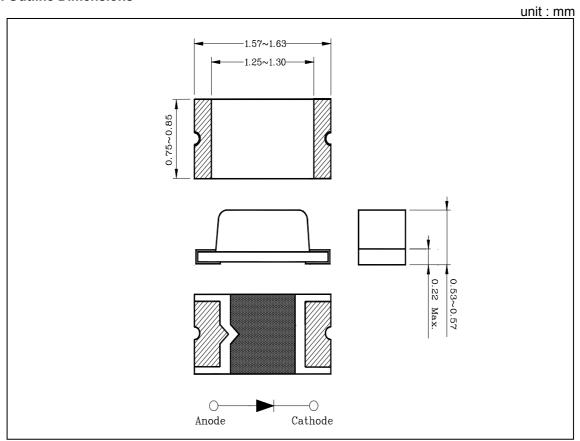
1. Features

- ◆ 1.6mm(L)×0.8mm small size surface mount type
- ◆ Thin package of 0.55mm(H) thickness
- ◆ Transparent clear lens optic
- ◆ Low power consumption type chip LED

2. Applications

- ◆ LCD backlighting
- Keypad backlighting
- Symbol backlighting
- ◆ Front panel indicator lamp

3. Outline Dimensions

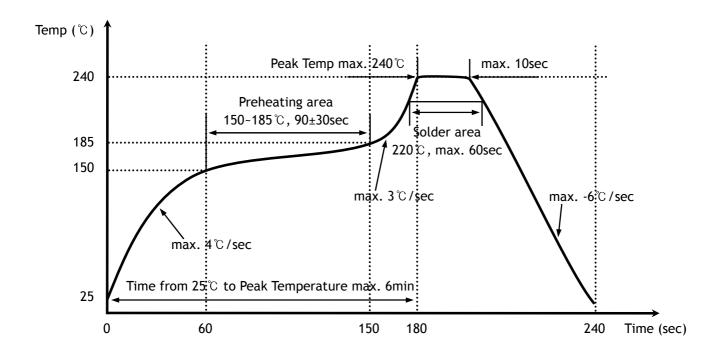


4. Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	68	mW
Forward current	${ m I}_{\sf F}$	20	mA
*1 Peak forward current	${ m I}_{\sf FP}$	50	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	- 25∼80	$^{\circ}$
Storage temperature range	T_{stg}	-30~100	$^{\circ}$
*2 Soldering temperature	T _{sol}	240℃ for 5 seconds	

^{*1.}Duty ratio = 1/16, Pulse width = 0.1ms



^{*2.}Recommended reflow soldering temperature profile

5. Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol		Test Condition	Min	Тур	Max	Unit
Forward voltage	V_{F}		I _F = 5mA	2.6	ı	3.4	٧
*3 Luminous intensity	I_{V}		I _F = 5mA	5	ı	40	mcd
Peak wavelength	λ_{P}		I _F = 5mA	460	-	480	nm
Spectrum bandwidth	Δ_{λ}		I _F = 5mA	-	35	-	nm
Reverse current	I	R	V _R =4V	-	-	10	uA
*4 Half angle	0/2	Х	I _F = 5mA	-	±65	-	deg
	θ/2	Y		-	±70	-	

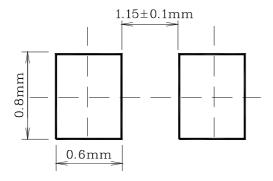
^{*3.} The test result of $I_F = 5 \text{mA}$ is only for reference

\bullet V_F / I_V / λ _P / Grade Classification (Ta=25°C)

Test Condition @ I _F =5mA						
Forward Voltage [V]	Luminous Intensity [mcd]	Peak Wavelength [nm]				
1:2.6~2.8	A . F . O	a:460~465				
2 . 2 0 . 2 0	A:5~9	h . 465470				
2:2.8~3.0	D . O . 22	b: 465~470				
2.20.22	B:9~22	470 475				
3:3.0~3.2	C + 22 - 40	c: 470~475				
4:3.2~3.4	C: 22~40	d: 475~480				

(Each V_F , I_V , λ_P range did not consider a margin. Please refer to $\pm 0.1V$ of V_F range, $\pm 18\%$ of I_V range, ± 1 nm of λ_P range as a permitted limit and do not use to combine grade classification. It must be used separately grade classification)

* Recommended Soldering Land Pattern



^{*4.0/2} is the off-axis angle where the luminous intensity is 1/2 the peak intensity

6. Characteristic Diagrams

Fig. 1 I_F - V_F

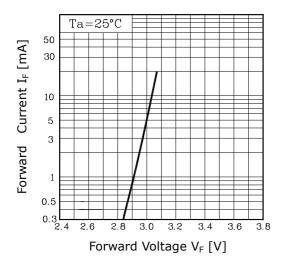


Fig. $3 I_F - Ta$

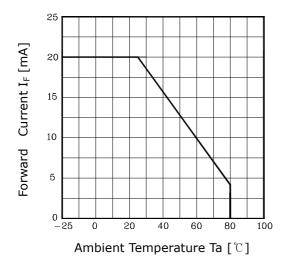


Fig. 5-1 Radiation Diagram(X)

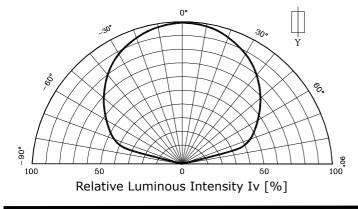


Fig. 2 I_V - I_F

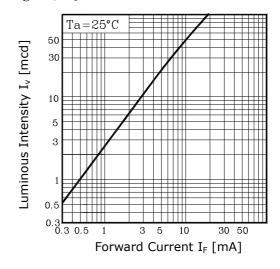


Fig.4 Spectrum Distribution

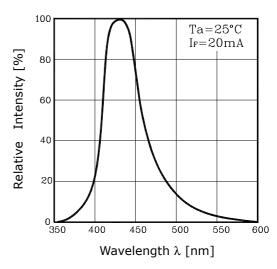


Fig. 5-2 Radiation Diagram(Y)

